

## ABSTRACT

The present invention relates to an oil spill identification system and oil spill identification sensors to be used in connection with this system. The system  
5 is used primarily on fixed offshore structures, but may also be used on fixed onshore constructions. The sensor comprises a combination of a radar and at least a microwave radiometer. The data collected are transmitted to a control station. Preferably, the transmittal takes place at pixel level between the sensors and the control station. The control station processes the data received at pixel  
10 level and transmits data to an end-user, preferably through the internet. The invention also relates to a method for utilizing the system and a use of the system.

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